Complete Summary

GUIDELINE TITLE

Diverticular disease.

BIBLIOGRAPHIC SOURCE(S)

Diverticular disease. Philadelphia (PA): Intracorp; 2005. Various p. [12 references]

GUIDELINE STATUS

This is the current release of the guideline.

All Intracorp guidelines are reviewed annually and updated as necessary, but no less frequently than every 2 years. This guideline is effective from July 1, 2005 to July 1, 2007.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Diverticular disease, including

- Diverticulosis
- Diverticulitis

GUIDELINE CATEGORY

Diagnosis
Evaluation

Management
Treatment

CLINICAL SPECIALTY

Colon and Rectal Surgery
Emergency Medicine
Family Practice
Gastroenterology
Internal Medicine

INTENDED USERS

Allied Health Personnel
Health Care Providers
Health Plans
Hospitals
Managed Care Organizations
Utilization Management

GUIDELINE OBJECTIVE(S)

To present recommendations for the diagnosis, management, and treatment of diverticular disease that will assist medical management leaders to make appropriate benefit coverage determinations

TARGET POPULATION

Individuals with diverticular disease

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis/Evaluation

1. Physical examination and assessment of signs and symptoms
2. Diagnostic tests
    - Fecal occult blood testing (FOBT)
    - White blood cell count
    - Computed tomography (CT) scan
    - Abdominal ultrasound (US)
    - Colonoscopy/sigmoidoscopy (contraindicated in acute diverticulitis)
    - X-ray with barium enema (contraindicated in acute diverticulitis)

Management/Treatment

Diverticulosis

1. Conservative treatment by increasing dietary fiber and recommending exercise
2. Angiographic embolization and/or surgical excision for unresolved bleeding

Diverticulitis

1. Liquid diet and broad-spectrum oral antibiotics
2. Hospital admission and further imaging studies
3. Surgical intervention including primary sigmoid resection and anastomosis and Hartmann's resection
4. Patient education and psychosocial support
5. Referral to specialists

MAJOR OUTCOMES CONSIDERED

- Effectiveness of treatment at resolving diverticulitis and preventing recurrence
- Complications of diverticulitis
- Morbidity, mortality, and hospital stays associated with surgical treatment (single-stage procedures, two-stage procedures [Hartmann's procedure] and three-stage procedures
- Mortality rate of free perforation of acute diverticulitis

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Hand-searches of Published Literature (Secondary Sources)
Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Searches were performed of the following resources: reviews by independent medical technology assessment vendors (such as the Cochrane Library, HAYES); PubMed; MD Consult; the Centers for Disease Control and Prevention (CDC); the U.S. Food and Drug Administration (FDA); professional society position statements and recommended guidelines; peer reviewed medical and technology publications and journals; medical journals by specialty; National Library of Medicine; Agency for Healthcare Research and Quality; Centers for Medicare and Medicaid Services; and Federal and State Jurisdictional mandates.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Not Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not stated

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus (Delphi)

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

A draft Clinical Resource Tool (CRT or guideline) is prepared by a primary researcher and presented to the Medical Technology Assessment Committee or the Intracorp Guideline Quality Committee, dependent upon guideline product type.

The Medical Technology Assessment Committee is the governing body for the assessment of emerging and evolving technology. This Committee is comprised of a Medical Technology Assessment Medical Director, the Benefit and Coverage Medical Director, CIGNA Pharmacy, physicians from across the enterprise, the Clinical Resource Unit staff, Legal Department, Operations, and Quality. The Intracorp Guideline Quality Committee is similarly staffed by Senior and Associate Disability Medical Directors.

Revisions are suggested and considered. A vote is taken for acceptance or denial of the CRT.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Comparison with Guidelines from Other Groups
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not stated

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Diagnostic Confirmation

Subjective Findings

- Diverticulosis
  - Constipation
  - Abdominal cramping
  - Left lower quadrant (LLQ) abdominal pain
  - Gastrointestinal bleeding
    - Occurs in 3 to 5 % of patients
    - May recur in 25% after initial hemorrhage
- Diverticulitis
  - Fever
  - Abdominal pain
  - Abdominal mass
  - Abdominal distention
  - Diarrhea secondary to infection and inflammation
  - Symptoms of obstruction

Objective Findings

- Diverticulosis
  - Hemoglobin (+) stools
    - Fecal occult blood testing (FOBT)
  - Left lower quadrant tenderness on abdominal exam
- Diverticulitis
  - Leukocytosis (increased white blood cell count)
  - Clinical abdominal exam:
    - Abdominal mass palpated on exam
    - Signs of lower intestinal obstruction
    - Signs of peritoneal irritation (e.g., rebound tenderness, guarding)

Diagnostic Tests

- Computed tomography (CT) scan - diagnostic method of choice in acute diverticulitis
- Abdominal ultrasound (US)
  - Abdominal pain/tenderness may impede study quality.
  - US image quality is often poor in obese patients.
- Colonoscopy/sigmoidoscopy
  - Direct visualization of intestinal tissues with fiber optic instrument passed rectally
  - Contraindicated in patients suffering from an acute episode of diverticulitis due to risk of perforation
- Barium enema

- Traditional radiologic study; a series of films taken after rectal instillation of radiopaque slurry (barium) to allow x-ray image of bowel topography
- Contraindicated in patients with suspected acute diverticulitis because of the risks of extravasation of barium through a perforation
- May be performed after resolution of acute inflammation

Differential Diagnosis

- Appendicitis (see the Intracorp guideline Appendicitis)
- Inflammatory bowel disease (see the Intracorp guideline Crohn's Disease)
- Colon carcinoma (see the Intracorp guideline Colon Cancer)
- Ischemic bowel disease
- Pelvic inflammatory disease (see the Intracorp guideline Pelvic Inflammatory Disease)
- Pyelonephritis (see the Intracorp guideline Pyelonephritis)
- Cholecystitis (see the Intracorp guideline Cholelithiasis)
- Bleeding ulcer (see the Intracorp guideline Peptic Ulcer Disease)
- Meckel's diverticulum (colonic)
- Vascular malformation

Treatment

Treatment Options

- Diverticulosis is frequently treated conservatively by increasing dietary fiber and recommending exercise to patients with mild disease uncomplicated by recurrent bleeding.
- When bleeding occurs, it tends to cease without specific therapy in over 75% of patients; bleeding that does not resolve spontaneously is often massive; these patients may be treated by angiographic embolization and/or surgical excision.
- Diverticulitis may also respond to conservative treatment
    - Liquid diet
    - Broad-spectrum oral antibiotics
- Hospital admission and further imaging studies may be appropriate when:
    - No improvement despite adequate outpatient therapy
        - Patient is unable to tolerate oral hydration.
        - Patient has severe pain requiring narcotic analgesics.
        - No improvement despite adequate outpatient therapy.
- Surgical alternatives include primary sigmoid resection with anastomosis and Hartmann's resection in patients with fecal or purulent peritonitis; mortality ranges from 2 to 36% in various studies.

Duration of Medical Treatment

- Medical - Optimal: 14 day(s), Maximal: 90 day(s)

Additional provider information regarding primary care visit schedules, referral options, and specialty care are provided in the original guideline document.

The original guideline document also provides a list of red flags that may affect disability duration, and return to work goals, including

- Resolving bleeding, pain without infection
- Resolving fever, with infection
- After hospitalization for surgical intervention

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Appropriate diagnosis, management, and treatment of diverticular disease that assist medical management leaders to make appropriate benefit coverage determinations

POTENTIAL HARMS

- A potential drawback of ultrasound is that it is "examiner dependent."
- Mortality associated with Hartmann's procedure ranges from 2.6 to 36.8%.

CONTRAINDICATIONS

CONTRAINDICATIONS

- Colonoscopy and sigmoidoscopy are contraindicated in patients suffering from an acute episode of diverticulitis due to risk of perforation.
- Barium enema is contraindicated in patients with suspected acute diverticulitis because of the risk of extravasation of barium through a perforation.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Diverticular disease. Philadelphia (PA): Intracorp; 2005. Various p. [12 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2005

GUIDELINE DEVELOPER(S)

Intracorp - Public For Profit Organization

SOURCE(S) OF FUNDING

Intracorp

GUIDELINE COMMITTEE

CIGNA Clinical Resources Unit (CRU)
Intracorp Disability Clinical Advisory Team (DCAT)
Medical Technology Assessment Committee (MTAC)
Intracorp Guideline Quality Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Not stated

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

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Reprints of complete guideline content may be purchased for $35.00 per title (plus tax in TX at 8.25% and CT at 1.0%). Please send e-mail request to lbowman@mail.intracorp.com.

AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- Policies and procedures. Medical Technology Assessment Committee Review Process. Philadelphia (PA): Intracorp; 2004. 4 p.
- Online guideline user trial. Register for Claims Toolbox access at www.intracorp.com.

Licensing information and pricing: Available from Intracorp, 1601 Chestnut Street, TL-09C, Philadelphia, PA 19192; e-mail: lbowman@mail.intracorp.com.

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI on August 10, 2005. The information was verified by the guideline developer on August 31, 2005.

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